

**DISK DRIVE MEASURING POLE TIP PROTRUSION BY PERFORMING A WRITE  
OPERATION TO HEAT THE TRANSDUCER**

**ABSTRACT OF THE DISCLOSURE**

A disk drive is disclosed which generates a pole tip protrusion (PTP) measurement by performing a write operation to heat the transducer while measuring a fly height of the transducer. A first data sequence written to the disk is read without heating the transducer to generate a first signal measurement. A second data sequence is then written to the disk in order to heat the transducer, and the first data sequence is again read to generate a second signal measurement. The PTP measurement is then generated in response to the first and second signal measurements.